AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A halogenated bisdiarylaminopolycyclic aromatic monomer represented by the following formula

wherein Z is a polycyclic arylene group, and each R' is independently a C_1 - C_{20} alkyl group, a carbo- C_1 - C_{20} -alkoxy group, a C_1 - C_{20} -alkoxy group, or a C_6 - C_{40} aryl group.

2.-3. (canceled).

4. (previously presented): The monomer of Claim 1 wherein each R' is methyl, ethyl, carbomethoxy, carboethoxy, methoxy, ethoxy, or hexyloxy, and Z is selected from the group consisting of 2,1,3-benzothiadiazole-4,7-diyls, 9,9-disubstituted fluorene-2,7-diyls, naphthalene-1,4-diyls, anthracene-9,10-diyls, and quinoxaline-5,8-diyls.

Attorney Docket No.: Q92643

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/579,215

5. (canceled).

6. (currently amended): A polymer comprising a backbone containing structural units of a bisdiarylaminopolycyclic aromatic monomer as shown:

wherein each Ar is independently a substituted or unsubstituted aryl group; each Ar" is a substituted or unsubstituted arylene group; and Z is a polycyclic arylene group; and

structural units selected from the group consisting of 1,4-phenylenes, 1,3- phenylenes, 1,2- phenylenes, 4,4'biphenylenes4,4'-biphenylenes, naphthalene-1,4-diyls, naphthalene-2,6-diyls, furan-2,5-diyls, thiophene-2,5-diyls, 2,2'-bithiophene-5,5-diyls, anthracenes-9,10-diyls, 2,1,3-benzothiadiazoles-4,7-diyls, N-substituted carbazole-3,6-diyls, N-substituted carbazole-2,7-diyls, dibenzosilole-3,8-diyls, dibenzosilole-4,7-diyls, N-substituted-phenothiazine-3,7-diyls, N-substituted-phenoxazine-3,7-diyls, triarylamine-diyls including triphenylamine-4,4'-diyls, diphenyl-*p*-tolylamine-4,4'-diyls, and N,N-diphenylaniline-3,5-diyls, N,N,N',N'-tetraaryl-1,4-diaminobenzene-diyls, N,N,N',N'-tetraarylbenzidine-diyls, arylsilane-diyls, and 9,9-disubstituted fluorenes-2,7-diyls.

7. (previously presented): A polymer comprising a backbone containing structural units of a bisdiarylaminopolycyclic aromatic monomer as shown:

Application No.: 10/579,215

wherein each Ar is independently a substituted or unsubstituted aryl group; each Ar" is a substituted or unsubstituted arylene group; and Z is a polycyclic arylene group, and the polymer backbone further comprises structural units selected from the group consisting of 9,9-bis(4-hexyloxyphenyl)fluorene-2,7-diyl, 9,9-dioctylfluorene-2,7-diyl, 9,9-dihexylfluorene-2,7-diyl, and 2,1,3-benzothiadiazol-4,7-diyl.

8. (previously presented): A polymer comprising a backbone containing structural units of a bisdiarylaminopolycyclic aromatic monomer as shown:

wherein Ar is selected from the group consisting of methylphenyl, ethylphenyl, carbomethoxyphenyl, carboethoxyphenyl, methoxyphenyl, ethoxyphenyl, and hexyloxyphenyl; Ar" is phenylene; and Z is selected from the group consisting of 2,1,3-benzothiadiazole-4,7-diyls, 9,9-disubstitated fluorene-2,7-diyls, naphthalene-1,4-diyls, anthracene-9,10-diyls, and quinoxaline-5,8-diyls.

9. (original): The polymer of Claim 8 wherein Ar is *p*-methylphenyl and Z is selected from the group consisting of 2,1,3-benzothiadiazole-4,7-diyl, 9,9-bis(4-hexyloxyphenyl)fluorene-2,7-diyl, 9,9-dioctylfluorene-2,7-diyl, 9,9-dihexylfluorene-2,7-diyl, naphthalene-1,4-diyl, anthracene-9,10-diyl, and quinoxaline-5,8-diyl.

- 10. (previously presented): A composition comprising a mixture of the polymer of Claim6 and a solvent for the polymer suitable for making an ink.
- 11. (previously presented): A composition comprising a mixture of the polymer of Claim 6 and another polymer selected from the group consisting of homo- or co-polymers (including terpolymers or higher) of polyacrylates, polymethacrylates, polystyrenes, polyesters, polyimides, polyvinylenes, polycarbonates, polyvinyl ethers and esters, fluoropolymers, polycarbazoles, polyarylene vinylenes, polyarylenes, polythiophenes, polyfurans, polypyrioles, polypyridines, and polyfluorenes, and combinations thereof.
- 12. (currently amended): An electronic device comprising a thin film of a polymer disposed between an anode and a cathode, which polymer comprises a backbone containing structural units of a bisdiarylaminopolycyclic aromatic monomer has structural units as shown:

AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q92643

Application No.: 10/579,215

wherein each Ar is independently a substituted or unsubstituted aryl group; each Ar" is a substituted or unsubstituted arylene group; and Z is a polycyclic arylene group, and the polymer backbone further comprises structural units selected from the group consisting of 9,9-bis(4-hexyloxyphenyl)fluorene-2,7-diyl, 9,9-dioctylfluorene-2,7-diyl, 9,9-dihexylfluorene-2,7-diyl, and 2,1,3-benzothiadiazol-4,7-diyl.

13. (currently amended): AnThe electronic device comprising a thin film of a polymer disposed between an anode and a cathode, which polymer comprises a backbone containing structural units of a bisdiarylaminopolycyclic aromatic monomer as shown:of Claim 12

wherein each Ar is independently a substituted or unsubstituted aryl group; each Ar" is a substituted or unsubstituted arylene group; and Z is a polycyclic arylene group; and the polymer further includes-structural units selected from the group consisting of 1,4-phenylenes, 1,3-phenylenes, 1,2-phenylenes, 4,4'-biphenylenes, naphthalene-1,4-diyls, naphthalene-2,6-diyls, furan-2,5-diyls, thiophene-2,5-diyls, 2,2'-bithiophene-5,5-diyls, anthracenes-9,10-diyls, 2,1,3-benzothiadiazoles-4,7-diyls, N-substituted carbazole-3,6-diyls, N-substituted carbazole-2,7-diyls, dibenzosilole-3,8-diyls, dibenzosilole-4,7-diyls, N-substituted-phenothiazine-3,7-diyls, N-substituted-phenoxazines-3,7-diyls, triarylamine-diyls including triphenylamine-4,4'-diyls, diphenyl-p-tolylamine-4,4'-diyls, and N,N-diphenylaniliine-3,5-diyls, N,N,N',N'-tetraaryl-1,4-

6

diaminobenzene-diyls, N,N,N',N'-tetraarylbenzidine-diyls, arylsilane-diyls, and 9,9-disubstituted fluorenes-2,7-diyls.

14. (original): The device of Claim 13 wherein Ar is *p*-methylphenyl, Ar" is phenyl, and Z is selected from the group consisting of 2,1,3-benzothiadiazole-4,7-diyl, 9,9-bis(4-hexyloxyphenyl)fluorene-2,7-diyl, 9,9-dioctylfluorene-2,7-diyl, 9,9-dihexylfluorene-2,7-diyl, naphthalene-1,4-diyl, anthracene-9,10-diyl, and quinoxaline-5,8-diyl.

15. (previously presented): The monomer of Claim 1 wherein Z is selected from the group consisting of 2,1,3-benzothiadiazole-4,7-diyl, , 9,9-disubstitated fluorene-2,7-diyls, naphthalene-1,4-diyls, anthracene-9,10-diyls, and quinoxaline-5,8-diyls.

16. (new): An electronic device comprising a thin film of a polymer disposed between an anode and a cathode, which polymer comprises a backbone containing structural units of a bisdiarylaminopolycyclic aromatic monomer as shown:

wherein Ar is selected from the group consisting of methylphenyl, ethylphenyl, carbomethoxyphenyl, carboethoxyphenyl, methoxyphenyl, ethoxyphenyl, and hexyloxyphenyl; Ar" is phenylene; and Z is selected from the group consisting of 2,1,3-benzothiadiazole-4,7-

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/579,215

Attorney Docket No.: Q92643

diyls, 9,9-disubstitated fluorene-2,7-diyls, naphthalene-1,4-diyls, anthracene-9,10-diyls, and quinoxaline-5,8-diyls.